

To: Distribution

From: Bob Hunnicutt, Tower Coordinator, Columbia Telecommunications

A meeting of the Telecommunications Transmission Facility Coordinating Group (TTF CG) was held on April 27, 2001. The following people were in attendance:

MEMBERS

Jane Lawton, Chairperson OCA (240) 777-3724 (FAX) 777-3770
Michael Ma M-NCPPC (301) 495-4595 (FAX) 495-1306
Dave Niblock DPS (240) 777-6252 (FAX) 777-6241
Willem Van Aller DIST (240) 777-2994 (FAX) 777-2950
Rey Junquera DPWT (240) 777-6086 (FAX) 777-6109
Eric Carzon OMB (240) 777-2763 (FAX) 777-2756

STAFF

Robert Hunnicutt CTC (410) 964-5700 (FAX) 964-6478
Julie Modlin CTC (410) 964-5700 (FAX) 964-6478
Amy Wilson OCA (240) 777-3684 (FAX) 777-3770

OTHER ATTENDEES

Deane Mellander VoiceStream (240) 264-8658 (FAX) 264-8610
Jim Michal Jackson & Campbell (202) 457-1652 (FAX) 457-1678
Ed Donohue Cole, Raywid/ATT (202) 659-9750 (FAX) 452-0067
M.G. Diamond Verizon Wireless (301) 951-1564
Pam Peckham Bechtel/AWS
Tom King Darnestown Assoc. (301) 417-9789
Chris Scott AT&T Wireless
Kathy Hubbard Resident
Alexa Graf AT&T Wireless
Norman Knopf Counsel for Hubbard
Don Collison PEPCO
Martin Klauber People's Counsel
Maureen Smith VoiceStream Wireless

Action Item: Reconsideration of AT&T monopole on Brink Road:
Jane Lawton asked attendees to introduce themselves, and explained that the focus of today's meeting was on reconsideration of certain aspects of the AT&T monopole at the Burrows Farm property on Brink Road at the request of the M-NCPPC. She asked the Tower Coordinator to present their findings.

Bob Hunnicutt stated that he thought it would be appropriate for Michael Ma to explain the nature of the M-NCPPC's request, and then have Ed Donohue describe what AT&T had done to comply with the request. He stated the Tower Coordinator would then brief the group on their findings.

Michal Ma explained that the M-NCPPC held a hearing on this application as part of its review for the Special Exception pending before the Board of Appeals. He stated a number of interested residents had attended the meeting and raised questions regarding the monopole, which prompted the Commission to ask AT&T to consider additional alternatives in lieu of erecting the monopole

where proposed. He stated there were two questions the Commission sought answers to: 1) whether the monopole could be sited at a different location on the property which would be less objectionable to the neighbors; and 2) can a number of microcells along Brink Road or a combination of microcells and co-locating on a nearby existing facility provide sufficient coverage to replace the service which would be provided by the antennas on the monopole. He stated that the Commission had sent a letter to the TTFCG requesting its review and comment on AT&T's reply to these alternatives.

Ed Donohue, representing AT&T, stated he would ask Chris Scott, AT&T's project engineer, to review the alternatives from the technical perspective, and Pam Peckham to discuss the site selection process.

Mr. Scott reviewed the history of the siting, stating that to serve this area of the County, AT&T examined a number of locations, all of which were co-locations on existing structures except for the Burrows Farm site. He displayed a large site plan for reference. He stated that AT&T had identified the Sunrise Apartments, the Brink Road WSSC water tank, the WSSC lattice tower at Log House Road, the WSSC water tanks at Woodfield and Warfield Roads, and the Airpark monopole as co-locations for antennas to serve most of this region of the County. However, a hole was left in the coverage area in the vicinity of the Burrows Farm site along Brink Road.

He stated that AT&T looked at several raw land sites, but they decided on the Burrows Farm property because the owner was willing to negotiate a lease, it was a large piece of property with adequate screening, and the location was generally central to the gap in their service coverage. He stated that the monopole would provide for a 150' antenna radiation center in order to provide adequate coverage in the area and successfully handoff service to the adjacent sites previously mentioned. He stated AT&T had met with the Hubbards, the neighboring property owners, and agreed to lower the monopole height from 150' to 130' to lessen the visual impact of the monopole. He stated the lower height would not provide optimal service and that the overall quality of service would suffer with the antennas at the lower elevation, but they believed they could still adequately achieve the handoff of signals from cell to cell. He stated AT&T had also agreed to relocate the monopole on the property 74' to the east, at the very edge of the ridge where the owner had permitted the monopole to be placed.

Pam Peckham explained that AT&T had investigated the "meadows" area on the Burrows Farm property as requested by the M-NCPPC, but found that in order to locate the monopole in that area, there were a number of physical complications that ruled that site out. She stated there would be a need for a very long gravel driveway, extending from the end of the existing Burrows driveway back through the property, to reach the base of the monopole. This would necessitate grading and disturbing the area around the streambed. On the exhibited site plan, she showed the group where the ridgeline fell away very steeply to a streambed and flood plain which would have to be crossed with a bridge of some sort. She stated that M-NCPPC environmental staff

had voiced concern regarding this disturbance in the wetland area. She added that the streambed would have to be covered by some sort of culvert as well. Regardless, she stated that the owner had refused to permit construction of the monopole in that area of his property.

Mr. Scott stated that, at the request of the Tower Coordinator, they had also looked at other alternative sites. He stated they considered use of the monopole at Fire Station 17 in Laytonsville, but found that site was too far to the east. They considered use of the PEPCO transmission line towers to the south, approximately 1.4 miles away. They modeled coverage from that location at a 150' elevation, although the existing towers were only 130' tall. At that elevation, they found that the coverage from the PEPCO transmission line towers was inadequate to completely serve the hole in coverage because it was too far south.

He stated they also considered the use of microcells, as requested by the M-NCPPC. He said the microcells provided limited coverage along Brink Road, but did not provide any service to the north or south of Brink Road and portions of Woodfield Road because the microcells did not provide coverage beyond the immediate roadway area. Mr. Scott stated they ran RF models at 55', the height of the PEPCO poles along Brink Road, the poles suggested for attachment. He stated he did not identify any particular poles, but made general assumptions that there would be poles near where he placed microcells in the computer model. He added that he used 55' because to replace all of the poles would present a whole new set of problems and concerns from a greater number of residents who may object to the taller poles.

Jane Lawton asked how tall the trees were along Brink Road. Mr. Scott replied they were approximately 60-70' tall. Ms. Lawton asked approximately how large an area needed to be covered along Brink Road. Mr. Scott replied that approximately 3 miles needed coverage.

Mr. Van Aller added he believed each microcell, given a flat terrain, may be able to cover an area with an approximate 1000' radius. He added, however, that he knew this area was quite hilly, so coverage may not be as great as a 1000' radius.

Mr. Donohue explained that Mr. Scott had the computer modeled RF maps with him, but because AT&T considered them confidential, he would only be willing to review them with the group and the parties directly related to this matter. Jane Lawton stated that she expected that the group would like to review the maps, and would ask unrelated parties to leave the room when that time came.

Eric Carzon displayed an illustration he made during the meeting, and asked if it generally reflected the nature of the gap in coverage in the area served by the microcells. Mr. Scott replied that the drawing did generally reflect the nature of the microcell service - that is, small cells of coverage along Brink and Woodfield Roads. Mr. Scott stated that they had discussed placing antennas on PEPCO's poles, and that PEPCO was cooperative and willing to permit the attachment, but AT&T would have to deal with any

objections raised by residents near each of the selected poles. He stated they had been trying to use microcells in Montgomery County but have not been very successful in doing so. He noted the example of the microcell on River Road where PEPCO had agreed to permit antennas to be attached and were already in construction when they were asked to relocate the microcell to a different pole some quarter of a mile away due to resident objections. Mr. Scott stated they also looked at the use of Allegheny transmission line facilities, but they were too far away to effectively cover the service area.

Mr. Tom King, an interested County resident, asked if once erected, the monopole would be available for additional carriers to co-locate, and if the TTFCG would review additional co-location applications at that monopole. Ms. Lawton stated that any new monopole must be able to accommodate at least three carriers and that any subsequent attachments to the facility would be reviewed by the TTFCG. She stated, however, that the Board of Appeals could waive that requirement under certain circumstances. Dave Niblock noted that the Special Exception application stated the monopole would accommodate three carriers.

Mr. King asked if AT&T had considered use of a church at Wesley Grove, approximately one mile away. Ed Donohue stated they had reviewed that church in connection with a different search ring. Chris Scott stated the church was approximately 3 miles away - too far away to provide adequate coverage. Mr. Van Aller agreed that the church was approximately 3 miles from the Burrows Farm property.

Ms. Lawton asked Norman Knopf, representing the Hubbards, to comment on the AT&T presentation. Mr. Knopf stated his client had a number of objections to this siting, and that the M-NCPPC had asked a number of questions of AT&T regarding this siting that he would summarize. First, he stated that although the M-NCPPC staff did not like crossing the streambed, the Chairman stated they would be willing to consider it. He stated that the Chairman noted that although it was not a preferred course of action, they had crossed streambeds in other situations in the County, and he did not seem to be too concerned about the long driveway. He said he believed the M-NCPPC would work with the environmental aspects of that issue.

Secondly, he stated that although the PEPCO towers were approximately 1.4 miles to the south and it did not appear they could serve to the north of Brink Road, he wondered why the PEPCO towers, in conjunction with another facility north of Brink Road, would not satisfactorily provide the desired coverage.

Third, he wondered what power was used in the computer model using the PEPCO towers, and if the power could somehow be increased to provide greater coverage to the service area. He also asked if the other sites surrounding the service area could have their signal strength increased to better provide coverage along the Brink Road area.

Kathy Hubbard stated that there were a number of parkland sites

in the general vicinity. She wondered why AT&T could not work with the M-NCPPC to site its facility on parkland, which she believed would be a more desirable location for this facility. She commented that she knew of one person whose property abutted a park who was initially approached by AT&T but never heard back from them. Mr. Donohue stated they had considered some areas like that, but they were discounted because of the need to remove many older trees. Pam Peckham stated AT&T had met with Bill Grayson and Terry Banks at the M-NCPPC to review use of parkland in that area and found that most of those parks were protected areas because they were in stream valleys, and in accordance with Commission policy, telecommunications use was the very lowest priority use for that land.

Mr. Knopf added that Ms. Hubbard has Sprint cellular service and finds the service coverage to be quite satisfactory. He wondered why AT&T could not co-locate with Sprint wherever it has its antennas to serve this area. He also noted that there may be a better location at the Ace Tree Service property on the opposite side of Brink Road from the Burrows Farm. Mr. Donohue commented that the only other carrier that has requested to attach to this monopole, should it be erected, is Sprint. So, he can only conclude that Sprint itself does not believe it has adequate coverage in this area, either. He said that AT&T considered the Ace Tree Service site but it was north and west of the Burrows Farm, it was closer to large residential areas, the site was much smaller than the Burrows Farm (2 acres at Ace Tree compared to 25 acres at Burrows Farm), and Ace was also a historic site and was on the Maryland Register.

Mr. Scott added that there were several churches that AT&T considered to the south and west of the Burrows Farm but the churches were short structures, one perhaps 2 stories, some with steeples, but AT&T found that there would need to be a monopole at those sites as well. Mr. Scott stated that in regard to powering cells, AT&T runs their cells at the maximum power output. He said the output could be reduced but generally could not be increased to provide adequate coverage from existing cell sites for service in this area.

Jane Lawton asked the Tower Coordinator to comment on its review of the reply from AT&T. Bob Hunnicutt stated that the Tower Coordinator had provided a letter to the TTFCG explaining their findings and that they would review what was in the letter but thought it would be more productive to discuss their findings with the AT&T RF propagation maps displayed for the TTFCG's response. He stated that with regard to use of another site on the Burrows Farm property, he noted that in the Tower Coordinator's initial recommendation they had mentioned that, given that the elevations were the same, alternate locations on the property would probably provide equal coverage of the desired service area. He added that AT&T's RF propagation maps for the meadows property verified that finding.

Jane Lawton asked all attendees not TTFCG members or directly related to this particular siting leave the room so the group may review the confidential RF propagation maps. Jim Michal stated that he wanted to remind the group that in discussing so many

different site alternatives, the group was bordering on redesigning AT&T's system configuration. He stated he does not believe that the role of the group is to require system re-design. M.G. Diamond agreed and expressed concern that a number of people who he did not believe were directly related to the matter did not appear to be leaving the meeting. Ms. Lawton asked AT&T to identify who they thought appropriate to remain. Mr. Donohue stated that the AT&T staff, Mr. Knopf and his client, and the TTFCG members were all parties to this matter and could remain. Ms. Lawton asked if Martin Klauber, People's Counsel, could remain as well. Mr. Donohue and Mr. Knopf agreed it was appropriate that Mr. Klauber remain for this review.

Mr. Hunnicutt asked Mr. Scott to display the RF propagation maps and explain their findings. Mr. Scott exhibited a general vicinity map and located the existing surrounding cells serving this area. For clarification, Mr. Donohue asked Mr. Scott to identify the location of the church mentioned by Mr. King. Mr. Scott showed the location of the church as being very close to the WSSC Log House lattice tower to the north. Mr. Van Aller concurred with the approximate location of the church and it was about 3 miles from the Burrows property. Referring to the RF map, Mr. Scott showed the coverage gap in the desired service area. In doing so, he noted the location of some of the other sites they had already discussed - the VFW location, the PEPCO poles, and the churches. Mr. Scott noted in considering the 130' PEPCO transmission line towers to the south, they would have to use a powermount to get the 150' elevation desired. Don Collison stated the existing transmission line facilities were approximately 135' tall. Mr. Scott displayed the RF propagation maps showing the coverage from existing sites, the gap in service coverage from those locations, and the service which would be provided using the PEPCO transmission line facilities. Julie Modlin, the Tower Coordinator engineer, noted that the coverage came very close to Brink Road but did not serve anything to the north of Brink Road adequately.

Mr. Scott displayed the RF propagation maps of the projected coverage using microcells. He noted the computer model for these microcells was not very reliable because of the low 55' height that was being used in the calculations. Mr. Van Aller stated they needed to attain an elevation which is higher than the trees along the roadway. He also noted there would also be significant differences in coverage between winter and summer, when the leaves were in full foliage. Ms. Modlin agreed and showed that the coverage from the microcell sites was generally just serving areas right along the roadways. Mr. Scott stated the coverage from a microcell would be limited to several hundred feet in any direction. Mr. Van Aller concurred.

Jane Lawton stated she believed it was in the public interest for the TTFCG to continue encouraging the carriers to consider as many alternatives as possible in these rural areas where there are not other existing structures to which they can attach their antennas.

Eric Carzon asked about the use of taller PEPCO poles. Don Collison stated they had considered 70' or higher where needed, and would be willing to work with carriers to change out poles to

that height, but that they were also sensitive to the community concerns. He added that the River Road case mentioned earlier, was related primarily to a new home owner objecting to the antennas at that location, but that PEPCO had been able to provide a site farther away yet still along River Road.

Jane Lawton asked if the cells would provide adequate coverage if they were above the tree line. Mr. Donohue stated there were tradeoffs between coverage, power, and height of antennas. Ms. Lawton asked if there were many homes in this area. Mrs. Hubbard replied that basically there were 2 acre lots, and the homes were set back far from the roadway. Ms. Modlin added that in using these cells, if you leave the main roadway areas, the signals would decrease in strength. Mr. Hunnicutt added there was a larger subdivision of new homes to the north of Brink Road. Mr. Van Aller referred to the site map, showing that it did appear there were some large areas of residential development in the Brink Road vicinity.

Ms. Lawton stated she believed that in its reply to the M-NCPPC, the TTFCG could say that, based on their review at today's meeting, the group reached a number of conclusions. First, that an alternate location on the Burrows Farm would provide adequate coverage. She added, however, it appears as though that would not be an option as the property owner will not permit it. Secondly, she stated that the microcells, given the present configuration of 55' poles, does not work very well, but if the poles were increased in height, could provide coverage to meet the traffic along Brink Road and Woodfield Road. She added that, perhaps in conjunction with using the PEPCO sites, it would meet some of the needs along Brink Road and to the south, partially meeting AT&T's service coverage requirements.

Eric Carzon added he felt that the group should temper that statement by stating it appeared as though AT&T had good reason to be concerned about not meeting their coverage needs in the neighborhoods but could meet their coverage needs along Brink Road. Ms. Lawton added that a combination of the microcells and PEPCO may mitigate most of the community concerns as well as provide a level of service for AT&T. Julie Modlin added that increasing the height of the poles could eliminate the need for so many microcells as well. Eric Carzon stated that the group statement should be balanced and should state that they looked at other sitings in conjunction with service in this area, and concurs that there is a hole in the service area, and that making modifications to other sites would not appear to significantly effect the service in this area.

Mr. Knopf asked the group to mention the Ace Tree Service site. Julie Modlin stated it was true that any site in the immediate vicinity could work as well as the proposed location on the Burrows Farm, given that the elevation and terrain was equivalent. Jane Lawton stated there was enough evidence presented by AT&T that appeared as though there were some down sides in using the Ace property, and that was especially true as there was not as much land at the Ace property. She asked the Tower Coordinator to summarize the conclusions reached by the TTFCG in a letter to the M-NCPPC Chairman and email it to the TTFCG

members for their review and comment, prior to drafting a final letter for her signature.

Michael Ma stated that the next hearing for the M-NCPPC was scheduled for mid-May, and May 30 was the date of the next Board of Appeals hearing. Eric Carzon summarized by noting it appeared the group concurred with the gap in coverage, and that was supported by the technical review provided to the TTFCG. Jane Lawton added that it was important that the TTFCG apply the same reasonable standard to all carriers in reviewing their applications.

In closing, Eric Carzon asked if moving the monopole to the front of the property had been considered. Julie Modlin reiterated that as long as the elevation was the same, the coverage should be roughly equivalent. Jane Lawton added that the group should also mention that the use of a tree monopole and sufficient landscaping at the base of the pole should be part of the group's recommendation. Mr. Ma stated he was sure the M-NCPPC would appreciate the TTFCG's further analysis and conclusion of AT&T's reply. Eric Carzon added that the group should emphasize they looked at the technical issues, not the public interest issues, in conducting their review. Julie Modlin added that it should be clear that although the alternatives discussed may provide some level of service, they do not provide the same level of service as would be provided by the monopole. Eric Carzon stated it should also be noted in reviewing AT&T's reply, the M-NCPPC and the Board of Appeals as well as the TTFCG should have confidence in its staff recommendations. He noted that when the TTFCG gets information from the Tower Coordinator, they are confident they are being given reliable information. Ed Donohue added the microcell RF analysis is theoretical. Norman Knopf thanked the group for their assistance.

Discussion Item - VoiceStream Antenna Change-out: Deane Mellander and Maureen Smith gave a general summary of their request to change-out old antennas for new antennas, and stated they did not believe the TTFCG needed to conduct a formal review of these actions; that a simple advisory notice from VoiceStream should be sufficient to keep the group advised as to what was occurring at each site. Mr. Hunnicutt stated that in the past, when other carriers have informed him of "simple" changes, by the time it was ready for TTFCG review, often more changes were being performed than were initially stated by the carrier. He stated that in this case, he now understands that it is not exactly a one-for-one change-out. Julie Modlin added that the antennas were larger, heavier, and more powerful. Mr. Hunnicutt added that they were not all the same configuration in size as well. Now, according to VoiceStream, there would be additional antennas added at some sites, so it would not always be a one-for-one change-out. Ms. Smith stated that whatever the final nature of the change-out would be, VoiceStream would accurately report that to the Tower Coordinator. She stated she believed that a simple advisory notice would adequately serve the group's needs in these cases. Mr. Hunnicutt stated he did not have an objection to an advisory method of bringing these matters to the group's attention, but the Tower Coordinator would require an application

be completed with notations regarding any increases in power and that the carrier was still meeting the cumulative RF guidelines as established by the FCC.

Mr. Van Aller raised the question of a threshold for review, which he believed the group needed to define. He thought it appropriate that the cutoff level should be if the applicant needed to obtain a building permit. Eric Carzon agreed with establishing a threshold but stated he did not believe a building permit was a sufficient indicator. Dave Niblock stated that in this case, there may not be a need for a building permit but there may be a need for an electrical permit. He added that, in this case, if they were replacing 3 antennas with 12 antennas, he believed it may be appropriate for the group to review it. Jane Lawton stated that the Tower Coordinator did not have the authority to approve action on any applications. Mr. Hunnicutt suggested this kind of situation could be a consent item on the agenda, as has been suggested by the group in the past. He stated the Tower Coordinator could review each of the applications submitted and put them on a consent agenda. Any member could request discussion of any application at the meeting. Otherwise, the group could review the Tower Coordinator's recommendation and could approve them without a prolonged discussion of each application. Mr. Hunnicutt favored this approach, stating he did not believe that a full review by the group or the Tower Coordinator was necessary in many of these kinds of cases. The group concurred, and Mr. Hunnicutt stated he would add these items as a consent agenda to the next TTFCG meeting.

Discussion Item - airBand Communications Antennas: Ms. Lawton stated she had been contacted by an airBand representative, stating that it had a client that had lost Internet service and was in need of an immediate replacement to meet its business needs. She stated that airBand was willing to move quickly on providing this service and had requested an expeditious review by the TTFCG.

Mr. Hunnicutt stated that when the original airBand antennas were reviewed, the question of the need for TTFCG review for user site antennas was raised. Upon checking with the County Attorney, it was determined that the way the code is written, any antennas on the exterior of the building would need to go through the TTFCG process regardless of size. He stated that the airBand user antennas were fairly small, and in this case, would be pole mounted. He had asked the airBand representative to send him an application, which they provided, but the application was incomplete. Ms. Lawton asked the Tower Coordinator to try to obtain all the desired information from airBand for review at the next TTFCG meeting. Mr. Hunnicutt stated he would do so, but cautioned the group about a review in this manner, as most of the carriers feel as though their applications require immediate attention as well. Mr. Van Aller stated that would place the Tower Coordinator in a difficult position. Mr. Hunnicutt reminded the group that the carriers requested a definite deadline for applications, and, as directed, he was adhering to the deadline dates, and that process was going quite smoothly. Regardless, he stated that the carriers still complain about not being placed on

the agenda when they miss the deadline date. Ms. Lawton stated that in this case, she would like to see this item on the next agenda. Mr. Hunnicutt stated he would attempt to obtain the complete information from airBand and present the applications at the next meeting.

Discussion Item - Upcoming TTFCG Meeting Dates: Mr. Hunnicutt noted that meeting dates were only scheduled through June, and he would like the group's guidance on scheduling meetings for the next six months. Amy Rowan Wilson stated she was in the process of preparing the County's Website and that it would be helpful if the group could establish a standard meeting time, such as the first Wednesday of the month. Mr. Hunnicutt stated he could select some dates that were approximately one month apart and bring them to the group for approval at the next meeting. Ms. Lawton stated she preferred that Mr. Hunnicutt select meeting dates for group approval at the next meeting.

The next meeting of the TTFCG is scheduled for Wednesday, May 2, 2001 at 2:00 p.m. in the Consumer Affairs Conference Room #225 of the COB.